



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

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Governor

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June 6, 2001

Rae Schnapp, Ph.D., Water Policy Director  
Brian Wright, Coal Policy Director  
Hoosier Environmental Council  
Old Centrum  
520 East 12<sup>th</sup> Street  
Indianapolis, IN 46202

Dear Dr. Schnapp and Mr. Wright:

Re: Ground Water Quality Standards

The proposed Ground Water Quality Standards rule scheduled for final adoption by the Water Pollution Control Board on June 13, 2001, is the culmination of many years of discussion and debate among a wide variety of interests and citizens.

We at IDEM have made our best effort to craft a rule that is consistent with the direction provided by the legislature in the ground water statutes and sets protective standards for Indiana's ground water resource, now and in the future.

It is true that all of HEC's positions and perspectives have not been included in the current version of the ground water quality standards rule. Similarly, all of the positions and perspectives of many involved in the business community, mineral extraction industry, provision of public water, and other interests have not been directly incorporated into the current version of the ground water quality standards rule. The current version of the rule represents sound public policy reflecting the input of all of these interested and affected groups.

The letters to HEC's membership and to the members of the Water Pollution Control Board indicate that the rule should:

- Apply to groundwater, not just regulated facilities
- Trigger preventative measures before ground water becomes unfit to drink
- Restrict management zone to 10 feet below the surface
- Exempt only contamination from natural sources and manmade spills that occurred before the rule
- Protect small water supplies ensuring equal protection for rural households
- Ensure that mining and agricultural operations have to meet numeric standards at property or permit boundaries

As you know, we have discussed these points in many forums. We do not agree with HEC's characterizations of the proposed rule nor do we agree that all of these preferences are consistent with the statute.

Following are specific comments regarding each of the positions you have taken with respect to the proposed rule:

### **“Applies to groundwater, not just regulated facilities”**

Our lawyers, and most others that have reviewed the underlying statute, have concluded that the statutory mandate to the Water Pollution Control Board is to define ground water standards for the use of the five state agencies as they conduct future rulemakings. The adoption of the ground water quality standards is but one step, albeit a vital step, in the protection of Indiana’s ground water, as mandated by the legislature.

The proposed rule takes the ADDITIONAL step of assuring that numeric and narrative criteria apply immediately to all drinking water and other beneficial use wells. While interim ground water quality standards are now in place, they apply only to public and industrial water supplies and rely heavily on general narrative criteria that have proven difficult to enforce. The proposed rule is a major improvement over the interim standards in that it establishes clear, enforceable numeric criteria supported by narrative criteria, a classification plan, and a method of determining where the standards must apply.

A statutory change would be required to construct the ground water quality standards similar to the surface water quality standards, which are directly enforceable immediately upon promulgation by the Board.

### **“Triggers preventative measures before groundwater becomes unfit to drink”**

We believe the proposed rule addresses HEC’s concerns with significantly strengthened prevention language from that preliminary adopted.

Specifically, Section 2(b) of the rule governs actions that the other state agencies take in adopting measures to protect ground water quality. Section 2(b) states: “When adopting rules, an agency shall, to the extent consistent with its regulatory authority, ensure that facilities, practices, and activities are designed and managed to eliminate or minimize potential adverse impacts to the existing ground water quality by applying preventative action levels, design standards, a monitoring framework, or other regulatory methods to the extent feasible.” This language may be somewhat revised by final adoption but will retain its strong requirement for proactive evaluation of preventative approaches.

We believe this requirement establishes a clear directive for agencies to adopt prevention measures to protect ground water from contamination, even before the numeric criteria are reached. In addition, all existing ground water protection requirements in other rules and laws, e.g., secondary containment, spill reporting, wellhead protection, still apply.

HEC has instead advocated that the rule mandate the use of numeric preventative action levels to trigger action if ground water concentrations increase by a certain amount over ‘current’ levels. This concept has not been adopted because it is impractical for many situations because sufficient ground water monitoring data to enforce it will not be available nor is it feasible to collect. Instead, each agency has an affirmative obligation to ensure that any impacts to ground water quality are eliminated or minimized to the extent feasible through any appropriate regulatory method.

We believe that this approach is an effective and practical means of “prevention”.

### **“Restricts management zone to 10 feet below the surface”**

The proposed rule language provides each agency the authority to establish an effective, appropriate ground water management zone for its particular application. In some instances, a mandated 10 foot below the surface management zone is not practical.

For example, it is often not practical to monitor directly underneath a potential source of contamination. Typically, a ground water monitoring network can only detect contaminants that are moving laterally in the ground water. Setting a mandated depth for ground water management zones will not improve ground water protection, and in fact, may, in some instances, impede the protection of ground water. The appropriate depth of the ground water management zone is best determined by the regulatory program with jurisdiction over the potential source of contamination.

**“Exempts only contamination from natural sources and manmade spills that occurred before this rule”**

We believe this concern refers to language in the rule that acknowledges that land and ground water being remediated under one of the state or federal land remediation programs will be governed by the laws and policies in place for those programs.

IDEM will use the numeric and narrative ground water criteria of standards in our policies governing remediations. However, state and federal programs do not necessarily have ‘cutoff dates’ such that contamination occurring after such a date is subject to one set of standards while contamination after another such date is subject to a different set. In most instances, this is impractical. Any contamination that occurs subsequent to this rule is subject to the existing laws and rules which are very effective at holding individuals liable for any unauthorized impact to the land or ground water.

**“Protects small water supplies ensuring equal protection for rural households”**

This concern refers to language in the proposed rule allowing reclassification of certain ground water as “limited” based on its potential yield. HEC believes that this language will allow low yielding aquifers that are used by “rural households” to be classified as limited. The proposed rule provides several safeguards to prevent such an occurrence. Only ground water that is: “Not currently used nor reasonably expected to be used for drinking water in the future, including the combined use of multiple low yield water bearing zones” can be proposed for reclassification. This reclassification must be public noticed. The ground water proposed for reclassification cannot be in a wellhead protection area. Also, one of the qualifying criteria for this classification is that the yield must be less than 200 gallons per day. This amount was chosen because it represents an amount that, based on EPA documents, is the minimum necessary for a well used for normal domestic purposes, including its use as a source of drinking water. In addition to these safeguards, it is our expectation that the individual regulatory programs will consider the distinct characteristics of the activities that they regulate when making determinations about ground water classifications.

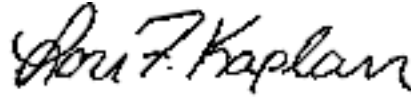
**“Ensures that mining and agricultural operations have to meet numeric standards at property or permit boundaries”**

The proposed rule recognizes the uniqueness of agricultural and mining operations. In the case of agriculture, pesticides and crop nutrients that have been applied in accordance with all applicable regulatory requirements have criteria that are equal to the ambient concentration. These ambient criteria apply only in the crop root zone, which can extend no deeper than ten feet below the surface, and it is only for pesticides and crop nutrients. Beyond the crop root zone, drinking water class criteria apply. For coal mining operations, the proposed rule recognizes that aquifers will originate in the spoil material after mining takes place. In these “new” aquifers, the constituents of ground water that are attributable to natural processes acting on the mined material itself have criteria set at the ambient concentration. The ambient criteria apply only to the zone of influence of the mining as determined by IDEM in conjunction with IDNR. All other constituent concentrations in the zone of influence must meet the drinking water class criteria.

Since preliminary adoption of the draft rule in October 1999, we at IDEM have conscientiously worked with the Ground Water Task Force and its workgroup to revise the standards to add clarity and address many of the concerns raised in subsequent comment periods.

We believe the proposed rule is a major and necessary step forward in protecting Indiana's valuable ground water resource. We hope that HEC and other groups will support this positive step and work with other interested groups and the agencies that regulate activities that may affect ground water quality to ensure that the ground water standards are fully and effectively implemented.

Sincerely,

A handwritten signature in black ink, appearing to read "Lori F. Kaplan". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Lori F. Kaplan  
Commissioner